

## **Symbol Detection with Large Frequency Error**

### **ABSTRACT OF THE DISCLOSURE**

System and method for detecting symbols wherein there may be a large frequency error. A preferred embodiment comprises receiving an estimated frequency error, calculating a vector based on the estimated frequency error, buffering symbols from two symbol streams, rotating the symbols from the two symbol streams using the vector, estimating a channel gain for the symbols in the second symbol stream, and applying the channel gain to the rotated symbols from the second symbol stream.